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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Tomojiro SUGIMOTO et al.

Group Art Unit: 3746

Application No.: 10/826,355

Filed: April 19, 2004

Docket No.: 119492

For: FUEL INJECTION VALVE

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

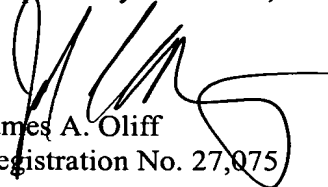
Sir:

Pursuant to 37 CFR §1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

- ☒ 1. This Information Disclosure Statement is being filed (a) within three months of the U.S. filing date of this non-CPA application, OR (b) before the mailing date of a first Office Action on the merits in the present application. No certification or fee is required.
- ☒ 2. Relevance of the non-English language reference 1 is discussed in the present specification.
- ☒ 3. A brief explanation of the relevance of the non-English language references 1-4 appears in the Appendix attached hereto.
- ☒ 4. English-language Abstracts of the non-English language references 1, 2 and 4 are attached hereto.

- ☒ 5. A computer-generated English translation of the following Japanese references has been obtained from the website of the Japanese Patent Office (<http://www.jpo.go.jp>), and is attached, but has not been reviewed for accuracy. See References 1-2.

Respectfully submitted,


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JAO:JSA/cqc

Date: July 19, 2004

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**DEPOSIT ACCOUNT USE
AUTHORIZATION**

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Information List (Form 1)

US Serial No.	
Our Ref.	TYT,ND,NJ-P008-US

The following is a List of References provided by Applicant. Please file an Information Disclosure Statement using this Information.

Document Number	Publication Date	Brief Explanation or Page(s) & Line(s) of Related Part(s)
Japanese Patent Publication (Kokai) No. 9-32695	February 4, 1997	After passing through a seal portion 21, fuel flows inwardly and downwardly. Then fuel smoothly guided to flow laterally inwardly between a bottom surface 25 of needle valve 2 and an upstream surface 31 of a metering plate 3. Then, fuel spray out through nozzle holes 4 formed in the metering plate 3. Please refer attached official abstract.
Japanese Utility Model Publication (Kokai) No. 60-15968	February 2, 1985	A vortex plate 10 is attached to a downstream surface of a valve sheet member 6. The vortex plate 10 has vortex generator holes 10a. The vortex generator holes 10a are arranged as shown in figure 3. The cross section of the vortex generator hole 10a is shown in figure 4. As shown in figure 4, the cross sectional area of the vortex hole 10a at upstream side is greater than that at downstream side. A pressure plate 11 is attached to downstream surface of the vortex plate 10. The

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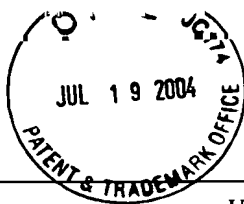
Document Number	Publication Date	Brief Explanation or Page(s) & Line(s) of Related Part(s)
Japanese Patent Publication (Kokai) No. 8-296532	November 12, 1996	<p>pressure plate 11 has a large circular hole at a center portion thereof. An orifice plate 12 is attached to a downstream surface of the orifice plate 12. The orifice plate 12 has orifices 12a.</p> <p>An annular groove 65 is formed at a top end surface of a needle 25. The main stream of fuel flows along the outer spherical surface 64 so as to be drawn to the annular groove 65.</p> <p>Please refer attached official abstract.</p>

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List of Prior Art (Form 2)

This Form 2 lists the patent family members related to the document(s) cited in Form 1.

Document(s) cited in Form 1	Patent family member(s)	Publication date
Japanese Patent Publication (Kokai) No. 9-32695	DE 196 29 755 C2	December 3, 1998

Sheet 1 of 1

Form PTO-1449 (REV. 8-83)		US Dept. of Commerce PATENT & TRADEMARK OFFICE		ATTY DOCKET NO. 119492		APPLICATION NO. 10/826,355	
INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)				APPLICANTS Tomojiro SUGIMOTO et al.			
				FILING DATE April 19,2004		GROUP 3746	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	
	1)	JP A 9-32695 w/ abst. & trans	02/04/1997	JAPAN			
	2)	JP A 8-296532 w/ abst. & trans	11/12/1996	JAPAN			
	3)	JP U 60-15968	02/02/1985	JAPAN			
	4)	DE 196 29 755 C2 w/ abstract	12/03/1998	GERMANY			
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)							
EXAMINER					DATE CONSIDERED		
Examiner: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

Date: July 19, 2004